

THE REMARKS

Applicant believes that entry of the above amendments and consideration of the following remarks will place this application into condition for allowance.

After entry of a Preliminary Amendment filed November 24, 2003, this application proceeded to examination with Claims 7 – 10 and Claims 29 – 33. In Applicant's Response to the restriction requirement, Claims 7 – 10 were withdrawn. Accordingly, those claims have been cancelled herein.

Claims 29 – 33, as originally filed and as amended herein, together with new Claims 34 – 37 are directed to seeds which have been treated with specific substituted and unsubstituted diformylureas. It has been found that seeds treated by these products produce superior plant growth. See the discussion in the specification of the application.

None of the prior art cited during prosecution of the parent application, including the Kezerian patent (United States Patent No. 4,950,323) applied in the current Office Action, either disclose or suggest the claimed seeds treated with the enumerated diformylureas as disclosed herein. Accordingly, the claims as now amended distinguish over the prior art and should be allowed.

I. THE AMENDMENTS

Claim 29 has been amended to specify that R_3 and R_4 must be hydrogen. This amendment is supported by Claims 3 and 16 as originally filed.

Claim 30 has been amended to specify that R_1 and R_2 must be selected from the group consisting of hydrogen and unsubstituted alkyl groups having from 1 to 3 carbon atoms. This amendment is supported by Claim 4 as originally filed and by the specification at page 7, lines 1 – 2.

Claim 32 has been amended to specify that R_3 and R_4 must be hydrogen while R_1 and R_2 are selected from the group consisting from the carbonyl groups derived from specifically listed acids. This amendment is supported by the disclosure in the specification at page 6, line 17 through page 7, line 1.

Claim 33 has been amended to specify that R_1 and R_2 must also be hydrogen. This amendment is supported by Claims 17 and 33 as originally filed.

New Claim 34 is supported by original Claim 4 and the disclosure of the specification at page 7, lines 1 – 2.

New Claims 35 and 37 are supported by original Claim 31.

New Claim 36 is supported by original Claims 39 and 1.

II. THE OBJECTION / REJECTION

A. The Objection to Claims 32 and 33

While the Examiner has cited no prior art against Claims 32 and 33, those claims have been objected to under 37 C.F.R. § 1.75. The Examiner asserts that those claims are substantially identical to Claims 29 and 30.

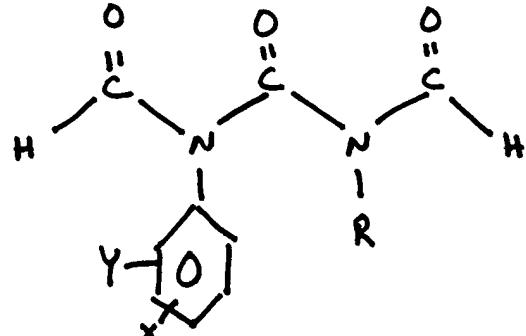
Applicant traverses the Examiner's objection. Applicant wishes to point out that Claims 32 and 33 as amended herein are not identical to and, in fact, are of substantially different scope than Claims 29 and 30. Claim 32 has been amended to specify that the carbonyl groups attached to each of the urea nitrogens must be derived from the acids consisting of formic, acetic, propionic, butyric, valeric, caproic, heptanoic and citric acids as disclosed in the specification at page 6, line 17 through page 7, line 1. Accordingly, Claim 32, together with Claim 33 depending therefrom, provide coverage of a different scope than Claims 29 and 30. Accordingly, the Examiner's objection has been traversed and should be withdrawn.

B. The Obviousness Rejection

The Examiner has rejected Claims 29 – 31 as obvious under 35 U.S.C. § 103(a) over the disclosure in the Kezerian patent. The Examiner asserts that the Kezerian patent teaches compounds which are within the scope of Applicant's claimed materials and which were known to possess herbicidal effects (citing to the abstract and columns 1 – 2 of the Kezerian patent). Finally, the Examiner asserts that those herbicidal compounds could be applied to seeds (citing to column 7, lines 40 – 42 of the Kezerian patent).

The Examiner's rejection is based upon the assertion that the Kezerian patent discloses compounds that are within the scope of Applicant's claimed materials. That assertion is incorrect.

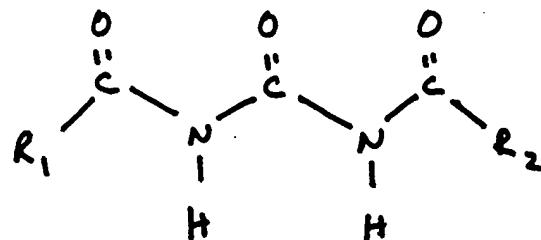
Kezerian discloses herbicidal bis-formyl-N-aryl-N'-alkyl ureas having the formula



wherein X, Y and R are defined as set forth in the Abstract of the Kezerian patent. It is clearly the X, Y-substituted aryl constituent that provides the herbicidal effects of the Kezerian compounds.

While bearing some general similarity to the Kezerian compounds, the materials disclosed and specified by Applicant's amended claims are significantly different. Applicant discloses both substituted and unsubstituted diformylureas which are structurally different and distinct from the compounds of Kezerian. In its

broadest embodiment, the substituted diformylureas employed by Applicant are defined by the formula



where R₁ and R₂ are the same or different and are selected from the group consisting of hydrogen, substituted and unsubstituted alkyl, allyl, vinyl and alkoxy groups having from 1 to 6 carbon atoms, substituted and unsubstituted phenyl groups and the halides.

As can readily be seen by comparison of the compounds disclosed by Kezerian with those disclosed and claimed herein, the herbicidal compounds of Kezerian are characterized by an X, Y-substituted aryl group and an alkyl group attached to each of the urea nitrogens, together with hydrogens bound on both of the outside carbonyl carbons. In contrast, the materials disclosed by Applicant and specified in the amended claims are limited to diformylureas having only hydrogen atoms bound to the urea nitrogens. See the broad formula set forth above and in amended Claim 29. The materials employed in Claim 32 are even more restricted. Like the material of Claim 29, the substituted diformylurea of Claim 32 is restricted to substituted diformylureas having hydrogens bound to the urea nitrogens. The material, however, is further restricted so that the outside carbonyl groups are restricted to groups selected from the carbonyl groups derived from the acids consisting of formic, acetic, propionic, butyric, valeric, caproic, heptanoic and citric acids. Finally, Claim 36 is restricted to seeds treated with unsubstituted

diformylurea. All of these compounds are structurally different from the compounds disclosed by Kezerian.

A comparison of the materials disclosed and now claimed by Applicant with those disclosed by Kezerian establishes there is no overlap between those materials. Accordingly, the Examiner's premise that the compounds taught by Kezerian are within the scope of Applicant's claimed materials is incorrect. Because that premise is incorrect, the rejection of the claims as obvious over the disclosure of Kezerian must be withdrawn.

III. CONCLUSIONS

In view of the above remarks and accompanying amendments, favorable consideration of original, amended and new Claims 29 – 37 now pending in the application is requested. It is believed that independent Claims 29, 32 and 36, together with Claims 30, 31, 33 – 35 and 37, depending therefrom, are allowable. All claims being allowable, Applicant submits that this case should be promptly passed to issue.

No additional claims fees are required with this Amendment. If, however, any fees are required with the application, the Commissioner is authorized to charge any required fees to Deposit Account No. 29-2112. This authorization is provided in duplicate on the accompanying transmittal letter.

If the Examiner considers that a telephone conference would expedite allowance, he is urged to contact the undersigned at (713) 227-8008.

Respectfully submitted,



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